



# ANNUAL DRINKING WATER QUALITY REPORT FOR 2010

PORT WASHINGTON WATER DISTRICT

38 SANDY HOLLOW ROAD, PORT WASHINGTON, NY 11050

(PUBLIC WATER SUPPLY ID # 2912267)

PREPARED BY: DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

330 CROSSWAYS PARK DRIVE, WOODBURY, NY 11797

## INTRODUCTION

To comply with State regulations, Port Washington Water District will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources.

We are pleased to provide you with this information because informed customers are our best customers. Our goal is to provide a safe and dependable supply of drinking water. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact the EPA Safe Drinking Water Hotline (1-800-426-4791), the Nassau County Department of Health at (516) 227-9692, or Italo Vacchio, Superintendent of the Port Washington Water District, at (516) 767-0171. We want you to be informed about your drinking water. If you want to learn more, please visit the EPA's website at <http://www.epa.gov/safewater/>, the Department of Health's website at <http://www.health.state.ny.us/>, and attend any of our regularly scheduled board meetings on Wednesday at 8:00 a.m., except the second week of each month when the board meets on Tuesday at 7:30 p.m. All meetings are at the District Office unless otherwise announced.

## WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities.

Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

One hundred percent of the water distributed to the Port Washington Water District consumers is pumped from wells that obtain water from aquifers underlying northwest Nassau County. The water levels in the aquifers furnishing water to the District dropped in the drought period of the mid-1960s and have risen in response to generally favorable precipitation that has occurred between 1970 and 2010. Available well supply from the aquifers has not diminished.

The Port Washington Water District includes 12 wells located at eight stations (ranging from 90' to 600' in depth), over 120 miles of water mains varying in size from 4" to 24" in diameter, approximately 1,200 fire hydrants, and 24.25 million gallons in storage capacity that includes 1.25 million gallons in 2 elevated storage tanks and 23 million gallons in two concrete underground storage reservoirs. The District is 100% metered and has an active cross connection control program in compliance with the State sanitary code.

During 2010, as in previous years, we had the following restrictions on our system as mandated by the New York State Department of Environmental Conservation. The total annual pumpage at the Stonytown Well 10 was restricted to 175 million gallons per year. The Sandy Hollow Wells 1 and 2 were restricted to a total pumpage of 30 million gallons per month. The Bar Beach Well 6 was restricted to maximum chloride content at the well discharge of 75 mg/L.

The Nassau County Department of Health has completed a Source Water Assessment Program for the Port Washington Water District. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how rapidly contaminants can move through the subsurface to the wells. The susceptibility of a water supply well to contamination is dependent upon both

the presence of potential sources of contamination within the well's contributing area and the likelihood that the contaminant can travel through the environment to reach the well. The susceptibility rating is an estimate of the potential for contamination of the source water; it does not mean that the water delivered to consumers is, or will, become contaminated. See the section **"ARE THERE CONTAMINANTS IN OUR DRINKING WATER?"** for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Drinking water is derived from 12 wells. The Source Water Assessment has rated all but 1 of the wells as having a very high susceptibility to industrial solvents and all wells as having a high to very high susceptibility to nitrates. One well is rated as having a medium high susceptibility to microbial contamination. The elevated susceptibility to industrial solvents is due primarily to point sources of contamination related to transportation routes and commercial/industrial facilities and related activities in the assessment area. The elevated susceptibility to nitrates is due to unsewered residential land use and related practices, such as fertilizing lawns, as well as the commercial/industrial activities in the assessment area.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting the Nassau County Department of Health.

### **HOW IS OUR DRINKING WATER TREATED?**

Sodium hypochlorite is routinely added to the wells discharging to the 20-million gallon Neulist Avenue and 1-million gallon Sandy Hollow ground level reservoirs in an amount necessary to maintain 0.5 milligrams per Liter (mg/L) chlorine residual at the discharge booster pumps. As required by the Nassau County Department of Health, the

District disinfects its water supply by feeding small amounts of tablet chlorine into the distribution system at each pumping station. Sodium hydroxide is routinely added at all well stations in an amount necessary to maintain a pH level between 7.5 and 8.5 and reduce corrosivity. Organic chemical removal facilities using granulated activated carbon (GAC) adsorption are in use at the Stonytown Road, Hewlett, Neulist Avenue, and Sandy Hollow well stations.

The three PWWD wells located at Christopher Morley Park are treated to remove volatile organic chemicals using packed tower aeration (stripping towers). The process is completely natural, using air delivered through the packing media in the tower past the cascading water to remove the volatiles from the water. The treated water discharges from the tower to a clear well where it is pumped to the distribution system. The Christopher Morley Park system has a capacity of 4 million gallons per day.

### **FACTS AND FIGURES**

Our water system serves approximately 33,000 residents through 9,137 service connections. The total water produced in 2010 was 1,231,532,000 gallons. The daily average of water treated and pumped into the distribution system is 3,374,060 gallons. Our highest single day was 8,078,000 gallons. The amount of water delivered to customers was 1,156,427,000 gallons. This leaves an unaccounted for total of 75,105,000 gallons. This water was used to flush mains; fight fires; fill road sweepers and tanker trucks; and during water main breaks, leakage in mains and water services, and unauthorized use of hydrants; and accounts for the remaining 75,105,000 gallons (6.1% of the total amount produced). In 2010, Port Washington Water District customers were charged \$1.60 per 1,000 gallons of water for an annual average residential water use of 126,565 gallons.

### **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, we

routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, Escherichia coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, trihalomethanes, haloacetic acids, radiological, and synthetic organic compounds. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

A supplement to this report showing laboratory analyses of all samples taken from each water supply well in service (raw and treated) and from the distribution system is available for viewing in the District office. Contact Mr. Italo Vacchio, Water District Superintendent, at the Port Washington Water District office, (516) 767-0171, located at 38 Sandy Hollow Road, Port Washington, NY 11050.

Contamination of the groundwater from Port Washington Water District has been detected in samples from some wells. All groundwater pumped to the distribution system from the operating Water District wells complies with New York State Department of Health Standards for public drinking water supplies. It should be noted that all drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or the Nassau County Department of Health at (516) 227-9692.

The table presented below, Table 1, shows the results of our monitoring for the period of January 1st to December 31st, 2010. Table 1 depicts which compounds were detected in your drinking water. Not included in the table

are the more than 110 other contaminants which were tested for and not detected in the distribution system. These undetected contaminants are listed herein:

Organics (Volatile, Synthetic, Other Principal, and Unspecified) – dichlorodifluoromethane, chloromethane, vinyl chloride, chloroethane, trichlorofluoromethane, methylene chloride, trans-1,2-dichloroethene, 2,2-dichloropropane, bromochloromethane, carbon tetrachloride, 1,1-dichloropropene, 1,2-dichloroethane, benzene, trichloroethene, 1,2-dichloropropane, dibromomethane, cis-1,3-dichloropropene, toluene, trans-1,3-dichloropropene, 1,1,2-trichloroethane, tetrachloroethene, 1,3-dichloropropane, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, m,p-xylene, o-xylene, styrene, isopropylbenzene, bromobenzene, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, n-propylbenzene, 2/4-chlorotoluene, 1,3,5-trimethylbenzene, tert-butylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, n-butylbenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 4-isopropyltoluene, 1,2-dichlorobenzene, 1,2,4-trichlorobenzene, hexachlorobutadiene, 1,2,3-trichlorobenzene, methyl tert-butyl ether, 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, lindane, heptachlor, aldrin, chlordane, dieldrin, endrin, methoxychlor, toxaphene, total PCBs, dalapon, dicamba, 2,4-D, pentachlorophenol, 2,4,5-TP (Silvex), dinoseb, picloram, aldicarb sulfoxide, aldicarb sulfone, oxamyl, methomyl, 3-hydroxycarbofuran, aldicarb, carbofuran, carbaryl, glyphosate, diquat, hexachlorocyclopentadiene, propachlor, hexachlorobenzene, simazine, atrazine, metribuzin, alachlor, metolachlor, butachlor, bis(2-ethylhexyl)adipate, bis(2-ethylhexyl)phthalate, benzo(a)pyrene, endoathall, and dioxin.

Microbiological – Escherichia Coliform (E-Coli) and Turbidity.

Inorganics and Physical Characteristics –

antimony, arsenic, barium, beryllium, cadmium, chromium, nickel, selenium, silver, thallium, mercury, free cyanide, color, fluoride, MBAS, nitrogen-ammonia (as N), nitrite (as N), and odor.

Disinfection By-Products [Haloacetic Acids (HAA5s)] - chloroacetic acid, bromoacetic acid, dichloroacetic acid, trichloroacetic acid, dibromoacetic acid, and total haloacetic acid.

The most recent radiological sampling took place in 2010. Samples were collected from District wells and analyzed for gross alpha and radium – 228 activities, measured in picocuries per Liter (pCi/L). The maximum contaminant level for gross alpha radioactivity in water is 15 pCi/L for an average of four quarterly samples. The average of the gross alpha samples collected in 2010 was 0.129 pCi/L. The maximum contaminant level for radium – 228 in water is 5 pCi/L for an average of four quarterly samples. The average of radium - 228 samples collected in 2010 was 1.853 pCi/L. In accordance with State regulations, the Port Washington Water District will discontinue quarterly distribution monitoring for radiological contaminants.

The most recent lead and copper sampling took place in 2009. Samples were collected from the distribution system at residential points and analyzed for lead and copper. Lead is measured in micrograms per liter (ug/L). The Action Level (AL) for lead is 15 ug/L. The level of lead presented in Table 1, 2.42 ug/L, represents the 90th percentile of the 31 sites tested. The AL for lead was not exceeded at any of the sites tested. Copper is measured in milligrams per liter (mg/L). The AL for copper is 1.3 mg/L, and the MCLG for copper is 1.3 mg/L. The level of copper presented in Table 1, 0.15 mg/L, represents the 90th percentile of the 31 sites tested. The AL for copper was not exceeded at any of the sites tested.

The highest level of a contaminant that is allowed in drinking water is known as

the Maximum Contaminant Level (MCL). The level of a contaminant below which there is no known or expected risk to health is known as the Maximum Contaminant Level Goal (MCLG). MCLGs allow for a margin of safety.

The highest level of a disinfectant allowed in drinking water is known as the Maximum Residual Disinfectant Level (MRDL). There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. The level of a drinking water disinfectant below which there is no known or expected risk to health is known as the Maximum Residual Disinfectant Level Goal (MRDLG). MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow is known as the Action Level (AL).

#### **WHAT DOES THIS INFORMATION MEAN?**

As you can see by Table 1 [page 6], our system had no MCL or AL violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

Although nitrate was detected below the MCL, the highest level detected was 9.16 mg/L, which is greater than one-half of the MCL. Therefore, we are required to present the following information on nitrate in drinking water:

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

We also are required to present the following information on lead in drinking water:

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

## IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

### MONITORING VIOLATION NOTICE

**PORT WASHINGTON WATER DISTRICT**  
**38 Sandy Hollow Road,**  
**Port Washington, NY 11050**  
**Public Water Supply ID No. 2912267**

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

#### Monitoring Requirement Not Met During the Third Quarter of 2010

Our water system violated a drinking water monitoring requirement during the third quarter of 2010. Even though it was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the third quarter of 2010, we did not monitor or test for nitrate from the Morley Park Well 9, and, therefore, cannot be sure of the quality of our drinking water during that time*

#### WHAT SHOULD I DO?

There is nothing you need to do at this time. No alternative water supply needed to be used. The table below lists the contaminant we did not properly test for during the third quarter of 2010 at the

mentioned well, how often we are supposed to sample for this contaminant, and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the time period when the follow-up samples will be taken.

During 2010, the District collected over 1,000 routine water quality samples from its 8 active wells and the distribution system, testing for over 150 contaminants. Out of the over 1,000 samples we collected, only one sample was missed. In 2010, the sample results for nitrates for Morley Park Well 9 are as follows: 5.47 mg/L during the 1st quarter, 4.92 mg/L during the 2nd quarter, and 4.97 mg/L during the 4th quarter. The maximum contaminant level (MCL) for nitrates is 10 mg/L. Once again, the maximum contaminant level was never exceeded, but, in 2010, we failed to collect one sample for nitrates during the 3rd quarter of 2010.

Contaminant:	<b>Nitrate</b>
Required Sampling Frequency:	<b>1 sample from Morley Park Well 9 quarterly</b>
Number of Samples Taken:	<b>0 Nitrate samples from Morley Park Well 9 during the third quarter of 2010</b>
When Samples Should Have Been Taken:	<b>July 1, 2010 to September 30, 2010</b>
When Samples Will Be Taken:	<b>Each Quarter of 2011 from Morley Park Well 9</b>

#### WHAT IS BEING DONE?

To avoid the reoccurrence of a missed monitoring sample, a system of checks and balances has been instituted and to comply with State monitoring requirements, the Port Washington Water District plans to take the required samples for Nitrate, as described in the last column of the table above.

For more information, please contact the Port Washington Water District at (516) 767-0171 or 38 Sandy Hollow Road, Port Washington, NY 11050, or the Nassau County Department of Health at (516) 227-9692.

*Please share this information with all the other people who drink this water,*

*especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by the Port Washington Water District.  
State Water System ID#: 2912267  
Date distributed: May 2011

#### DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to disease-causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia, and other microbial pathogens are available from the Safe Drinking Water Hotline (1-800-426-4791).

#### INFORMATION ON UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which the EPA has not established drinking water standards. In 2010, the Port Washington Water District monitored for additional contaminants under the EPA's Unregulated Contaminant Monitoring Regulation (UCMR). The information collected under the UCMR will help the EPA determine future drinking water regulations. The results of the monitoring program are available upon request.

#### INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

##### Spanish

*Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.*

## WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Water is a vital resource. The Port Washington Water District encourages water conservation. The District, after holding a public hearing, adopted a Water Conservation Plan in 1996. This plan was updated and revised in August 2003. This plan contains regulations concerning plumbing fixtures and use of water for irrigation, swimming pools, air conditioning, car washing, etc., and is designed to reduce unnecessary water use.

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems, and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever

you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank and watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you could save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances, then check the meter after 15 minutes. If it moved, you have a leak.
- Water your lawn in the early morning to reduce water loss by evaporation.

## SYSTEM IMPROVEMENTS

In 2010, the Port Washington Water District made some improvements to our water system. Tablet chlorinators were installed at each pumping station. Also, a 16-inch water main was installed as a second transmission line for the Harbor Ridge Estates development.

Some system improvements are planned for 2011. The electrical panel at Well 7 will be replaced. The pump at Neulist Avenue Well 1 will be rehabilitated. The Crooker Place water main will be replaced. Also, a new SCADA system will be installed at all well pumping stations to remotely monitor well operations and increase system reliability.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

## CLOSING

Thank you for allowing us to continue to provide your family with clean, quality drinking water again this year. The Port Washington Water District works hard to provide top quality water to every customer. We ask that all our customers help us protect our water resources. Please visit the Port Washington Water District on the Web at [www.pwwd.org](http://www.pwwd.org) to download Water District Regulations, access the full Annual Water Quality Report, and check on recent District legislation, planned events, and projects.

Table 1

Contaminant	Violation (Yes/No)	Date of Sample	Level Detected Avg/Max (Range) <sup>(1)</sup>	Unit Measurement	MCLG Or MRDLG	Regulatory Limit (MCL, MRDL, or AL)	Likely Source of Contaminant
<b>Microbiological Contaminant</b>							
Total Coliform Bacteria	No	8/9/2010	2 positive samples	n/a	0	MCL = 2 or more positive samples in one month	Naturally present in the environment
<b>Inorganics</b>							
Calcium	No	4/5/2010	32.2 (15.9 - 32.2)	mg/L	n/a	n/a	Naturally occurring
Chloride	No	3/25/2010	47.8 (32.9 - 47.8)	mg/L	n/a	MCL - 250	Naturally occurring or indicative of road salt contamination
Copper	No	6/25/2009	0.15 (ND - 0.26) <sup>(2)</sup>	mg/L	1.3	AL - 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Iron	No	4/5/2010	40 (ND - 40)	µg/L	n/a	MCL - 300	Naturally occurring
Lead	No	6/23/2009	2.42 (ND - 8.67) <sup>(3)</sup>	µg/L	0	AL - 15	Corrosion of household plumbing systems; Erosion of natural deposits
Magnesium	No	4/5/2010	14.3 (7.85 - 14.3)	mg/L	n/a	n/a	Naturally occurring
Manganese	No	4/5/2010	130 (ND - 130)	µg/L	n/a	MCL - 300	Naturally occurring
Sodium	No	7/6/2010	28.4 (18.2 - 28.4)	mg/L	n/a	20 / 270 <sup>(4)</sup>	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate	No	4/5/2010	67.3 (18.3 - 67.3)	mg/L	n/a	MCL - 250	Naturally occurring
<b>Inorganics - Nitrate</b>							
Nitrate as N	No	6/21/2010	9.16 (3.38 - 9.16)	mg/L	10	MCL - 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Physical Characteristics</b>							
Calcium Hardness	No	4/5/2010	80.5 (37 - 80.5)	mg/L	n/a	n/a	Naturally occurring
Langlier Saturation Index	No	4/5/2010	-0.54 [-1.62 - (-0.54)]	units	n/a	n/a	Naturally occurring
pH	No	4/5/2010	7.8 (6.2 - 7.8)	units	n/a	n/a	Naturally occurring
Total Alkalinity	No	7/6/2010	57 (27.4 - 57)	mg/L	n/a	n/a	Naturally occurring
Total Dissolved Solids	No	4/5/2010	248 (162 - 248)	mg/L	n/a	n/a	Naturally occurring
Total Hardness	No	4/5/2010	129 (69.2 - 129)	mg/L	n/a	n/a	Naturally occurring
<b>Disinfectant</b>							
Chlorine Residual	No	5/3/2010	0.5 (0.2 - 1.1)	mg/L	n/a	MRDL - 4 <sup>(5)</sup>	Water additive used to control microbes
<b>Disinfection By-Products</b>							
Bromoform	No	7/6/2010	0.6 (ND - 1.6)	µg/L	n/a	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms
Chloroform	No	9/20/2010	0.46 (ND - 0.6)	µg/L	n/a	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms
Bromodichloromethane	No	9/8/2010	0.29 (ND - 0.6)	µg/L	n/a	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms
Dibromochloromethane	No	7/6/2010	0.57 (ND - 1.7)	µg/L	n/a	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms
Total Trihalomethanes	No	9/8/2010	0.88 (ND - 3.5)	µg/L	n/a	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms
<b>Volatile Organic Contaminants</b>							
cis-1,2-Dichloroethene	No	4/5/2010	1.27 (ND - 3.5)	µg/L	n/a	MCL - 5	Discharge from industrial chemical factories
1,1-Dichloroethene	No	9/20/2010	0.33 (ND - 0.6)	µg/L	n/a	MCL - 5	Discharge from industrial chemical factories
1,1,1-Trichloroethane	No	9/20/2010	0.79 (ND - 1)	µg/L	n/a	MCL - 5	Discharge from metal degreasing sites and other factories
<b>Other Principal Organic Contaminants</b>							
Bromomethane	No	7/6/2010	0.34 (ND - 0.9)	µg/L	n/a	MCL - 5	Used to kill a variety of pests; used to make other chemicals or as a solvent to get oil out of nuts, seeds and wool
1,1-Dichloroethane	No	6/1/2010	2.11 (ND - 3)	µg/L	n/a	MCL - 5	Released into environment as fugitive emissions; Degreasing agent
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>							
Heptachlor Epoxide	No	7/6/2010	13 (ND - 22)	ng/L	n/a	MCL - 200	Breakdown of Heptachlor, a residue of a banned pesticide
<b>Radioactive Contaminants</b>							
Gross Alpha Activity <sup>(6)</sup>	No	10/19/2010	0.129 (-0.796 - 0.984)	pCi/L	0	MCL - 15	Erosion of natural deposits
Radium - 228 <sup>(6)</sup>	No	10/19/2010	1.853 (0.62 - 3.98)	pCi/L	0	MCL - 5	Erosion of natural deposits

**Notes:**

- (1) When compliance with the MCL is determined more frequently than annually, the data reported is the highest average or maximum of any of the sampling points used to determine compliance and the range of detected values.  
(2) The level presented represents the 90th percentile of the 31 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, thirty-one samples were collected at your water system and the 90th percentile value was the twenty-eighth highest value (0.15 mg/L). The action level for copper was not exceeded at any of the sites tested.  
(3) The level presented represents the 90th percentile of the 31 sites tested. The action level for lead was not exceeded at any of the sites tested.  
(4) Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.  
(5) The value presented represents the Maximum Residual Disinfectant Level (MRDL). MRDLs are not currently regulated, but in the future they will be enforceable in the same manner as MCLs.  
(6) The contaminant level represents the average of raw water samples taken from multiple wells. The data is reported as the average level and the range of values.

**Definitions:**

MCL: Maximum Contaminant Level; The level of a contaminant in drinking water. MCLs are set as close to the MCLG as feasible.  
MCLG: Maximum Contaminant Level Goal; The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.  
MRDL: Maximum Residual Disinfectant Level; The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.  
MRDLG: Maximum Residual Disinfectant Level Goal; The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.  
AL: Action Level; The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.  
ND: Non-Detects; Laboratory analysis indicates that the constituent is not present.  
mg/L: Milligrams per Liter. Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).  
µg/L: Micrograms per Liter. Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).  
pCi/L: Picocuries per Liter; A measure of the radioactivity in water.  
n/a: not applicable; i.e., no value is assigned by regulatory authorities.